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December 24, 1998

Magalie Roman Salas, Secretary
Federal Communications Commission
The Portals
445 Twelfth Street, S.W.
12th Street Lobby, TW-A325
Washington, D.C. 20554

Re: Errata; Bell Atlantic/GTE Merger, CC Docket No. 98-184

Dear Ms. Salas:

On December 23, 1998, copies of the Joint Reply of Bell Atlantic Corporation and GTE Corporation to Petitions To Deny and Comments were timely filed in the above referenced docket. Unfortunately, the copy of the Declaration of Jacques Crémer and Jean-Jacques Laffont on behalf of GTE Corporation and Bell Atlantic Corporation included in the Joint Reply contained minor typographical errors and omissions. Attached please find a corrected version of the declaration, which has been served on all persons who were served with the Joint Reply. We apologize for any inconvenience this may have caused.

If you have any questions, please do not hesitate to contact me.

Sincerely,

R. Michael Senkowski

R. Michael Senkowski

Attachment

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of GTE CORPORATION, Transferor And BELL ATLANTIC CORPORATION, Transferee For Consent to Transfer of Control	CC Docket No. 98-184

DECLARATION OF JACQUES CRÉMER AND JEAN-JACQUES LAFFONT

ON BEHALF OF

GTE CORPORATION AND BELL ATLANTIC CORPORATION

DECEMBER 15, 1998

CORRECTED VERSION

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I. INTRODUCTION

B. Purpose of Declaration

1. The large interexchange carriers ("IXCs") have filed numerous expert declarations in support of their allegations that the merger of GTE and Bell Atlantic will be counter to the public interest. In particular, the bulk of these allegations can be found in the Declaration of Stanley M. Besen, Padmanabhan Srinagesh, and John R. Woodbury,[1] which relies on a declaration previously submitted by Michael L. Katz and Steven C. Salop in opposition to the SBC-Ameritech merger proceeding before this Commission.[2]

2. In our declaration, we show that the Katz-Salop analysis—which concludes that a merger between incumbent local exchange carriers ("ILECs") will induce the parties to engage in increased exclusionary behavior—is incomplete and misleading on theoretical grounds and rests on shaky empirical evidence. The allegations in the Besen-Srinagesh-Woodbury Declaration are therefore irrelevant, based as they are on an insufficient theoretical foundation. Likewise, the Commission should give little weight to other submissions that rely on arguments similar to those proposed by Katz and Salop, including the Declaration of Kenneth C. Baseman and A. Daniel Kelley,[3] and the Affidavit by David L. Kaserman and John W. Mayo.[4] We also address

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1 Declaration of Stanley M. Besen, Padmanabhan Srinagesh, and John R. Woodbury: An Economic Analysis of the Proposed Bell Atlantic/GTE Merger (filed on behalf of Sprint Communications Company L.P., Nov. 23. 1998), hereinafter *Besen-Srinagesh-Woodbury Declaration.*

2 Declaration of Michael L. Katz and Steven C. Salop: Using a Big Footprint to Step on Competition: Exclusionary Behavior and the SBC-Ameritech Merger, Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations from Ameritech Corporation, Transferor, to SBC Communications Inc., Transferee, CC Dkt. No. 98-141 (filed on behalf of Sprint Communications Company L.P., Oct. 14, 1998), hereinafter *Katz-Salop Declaration.*

3 Declaration of Kenneth C. Baseman and A. Daniel Kelley (filed on behalf of MCI WorldCom, Inc., Nov. 23, 1998), hereinafter *Baseman-Kelley Declaration.*

4 Affidavit of David L. Kaserman and John W. Mayo (filed on behalf of AT&T Corp., Nov. 23, 1998), hereinafter *Kaserman-Mayo Affidavit,* specifically referring to its similarity with the Katz-Salop declaration at note 21, p. 21.

miscellaneous allegations made in these other declarations, which are based on an improper understanding of the literature or on erroneous facts. We conclude that, as the Katz-Salop hypothesis is deficient in both fact and theory, the Commission should dismiss the notion that this merger would lead to increased exclusionary behavior by Bell Atlantic and GTE.

B. Summary

3. In their declaration, Katz and Salop speculate the possible existence of a spillover effect of exclusionary behavior across markets. In particular, they argue that exclusionary behavior is prevalent among ILECs, and that this behavior generates artificial competitive advantages for incumbents and thwarts entry by competitors. Further, they argue that the merger would increase the incentives of the constituent firms to engage in exclusionary behavior because of a so-called "externality effect." We find the analysis wanting on two counts.

4. First, Katz and Salop do not provide empirical evidence of exclusionary behavior with a spillover effect. Moreover, the spillover itself cannot exist unless a single firm has the capacity and incentives to engage in exclusionary behavior on its own. We review the alleged evidence to this effect and, in light of the facts we have seen, find it lacking.

5. Second, we demonstrate the weakness of Katz and Salop's crucial theoretical allegation that the merger would increase the level of exclusionary behavior. Their analysis is incomplete, as they do not attempt to define precisely the exclusionary behavior that would lead to the spillover effect they hypothesize. We complete their analysis in two directions, discussing possible alleged, yet unproven, exclusionary tactics and a more precise analysis of the actions of different players in the "entry game." This more precise analysis shows that there is no convincing argument that the merger will increase exclusionary behavior.

6. Finally, we review miscellaneous allegations by other commenters that are based on erroneous facts, theory and analysis. We focus particularly on the allegations that the transaction will somehow allow the combined entity to dominate the Internet, demonstrating how this transaction is substantially different from the MCI WorldCom transaction and therefore does not present substantive competitive concerns in the market for Internet services.

C. Statements of Qualifications

1. Jacques Crémer

7. My name is Jacques Crémer. I am Professor of Economics at the École Polytechnique, specializing in industrial organization and regulation, and Directeur de Recherche au Centre National de la Recherche Scientifique (CNRS) at the University of Toulouse, where I am also Director of the Graduate Program in Economics. I was formerly Professor of Economics at Virginia Polytechnic Institute & State University, as well as Assistant Professor of Economics at the University of Pennsylvania.

8. I have been an Associate Editor of *Rand Journal of Economics, International Journal of Industrial Economics*, and the *European Economics Review*. I have published a number of books and articles, including: "Incentives and the Existence of Pareto-Optimal Revelation Mechanisms" (with Claude d'Aspremont and Louis-André Gérard-Varet), "Manipulation by Coalition Under Asymmetric Information: The Case of Groves Mechanisms", and "Unique Implementation in Auctions and in Public Goods Problems" (with Claude d'Aspremont and Louis-André Gérard-Varet).

9. I have consulted on regulatory issues for France Telecom, the World Bank, the OECD, and for the European Commission, contributing to a major survey of regulatory practices

for Directorate-General II. On behalf of GTE in the recent merger of MCI and WorldCom, I prepared a submission to the European Commission's Competition Directorate.[5] I have an Ingénieur diplômé from the École Polytechnique in 1970, and have a M.S. in Management from the Massachusetts Institute of Technology in 1973, and a Ph.D. in Economics from the Massachusetts Institute of Technology in 1978. A copy of my curriculum vitae is attached as Attachment 1.

2. Jean-Jacques Laffont

10. My name is Jean-Jacques Laffont. I am Professor of Economics at the University of Toulouse, specializing in industrial organization and regulation, and a Professor at the Institut Universitaire of France. Former academic appointments include Taussig Research Professorship at Harvard University, and a Sherman Fairschild Fellowship at the California Institute of Technology. I have been president of the Econometric Society and president of the European Economic Association.

11. I have been an Associate Editor of the *Journal of Mathematical Economics*, *Journal of Economic Theory*, *European Economic Review*, *Social Choice and Welfare*, and the *Journal of Public Economy Theory.* I have published a number of books and articles in scholarly journals, including: *Incentives in Public Decision Making* (with J. Green), *Fundamentals of Public Economics*, *Economics of Uncertainty and Information*, *A Theory of Incentives in Procurement and Regulation* (with J. Tirole), "Reciprocal Supervision, Collusion and Organizational Design" (with M. Meleu), "Collusion Under Asymmetric Information" (with D. Martimort), "Creating Competition Through Interconnection," "Access Pricing and Competition," and "Network Competition: I & II" (with P. Rey and J. Tirole).

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[5] See Jacques Crémer, Patrick Rey, and Jean Tirole, "The Degradation of Quality and the Domination of the Internet."

12. I have consulted on regulatory issues for France Telecom, Electricité de France, the World Bank, and the European Commission, contributing to a major survey of regulatory practices for Directorate-General II. I am also currently a member of the Council of Economic Analysis to the Prime Minister of France and the founder and director of l'Institut d'Economie Industrielle (Institute for Industrial Economics) in Toulouse, one of the premier academic economic research institutes in Europe. I received a degree in Engineering from the Ecole National de la Statistique et de l'Administration Economique in 1970, and a Ph.D. in Economics from Harvard University in 1975. A copy of my curriculum vitae is attached as Attachment 2.

II. EXCLUSIONARY BEHAVIOR – CASE UNPROVEN

B. Technical Considerations

13. Before plunging into a review of the evidence on exclusionary behavior, we consider it instructive to examine how an incumbent local exchange carrier (ILEC) might implement non-price exclusionary behavior. As we are not telecommunications engineers, we rely on the regulatory record, which is nonetheless highly instructive.

14. ILECs have already demonstrated through previous filings with this Commission that they cannot selectively degrade the quality of traffic transmitted to rival long distance or local operations while leaving traffic transmitted to their own affiliates unaffected. To take the most common example of alleged quality degradation, it has been shown that ILECs do not have the ability, with current technology, to add "noise" to a subscriber line only when it is being used to provide terminating access to an unaffiliated interexchange carrier (IXC).[6]

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[6] See Affidavit of Daniel J. Kocher on behalf of Ameritech Michigan, CC Docket No. 97-137, filed July 2, 1997, hereinafter *Kocher Affidavit*, and Reply Affidavit of William C. Deere on behalf of SBC Corp. And Ameritech Corp., CC Docket 98-141, filed November 12, 1998, hereinafter *Deere Affidavit*.

15. Another commonly alleged form of exclusionary behavior is "slow-rolling"–failure to provide in a timely manner interconnection, unbundled network elements ("UNEs"), or wholesale services for resale to their competitors. However, a large array of FCC regulations and provisions in the 1996 Telecommunications Act are aimed at preventing ILECs from foreclosing access to rival competitive services carriers ("CSCs").[7] The U.S. regulatory framework comprehensively prohibits exclusionary behavior on the part of ILECs in the provision of required inputs to their competitors. In addition, any ILEC wanting to attempt exclusionary behavior would also have to find a way around technical obstacles and monitoring by competitors and regulators.

16. The buyers of inputs from ILECs are not passive consumers. Instead, they actively audit the quality of services to ensure that they are not subject to discrimination. AT&T, for instance, monitors the quality of ILEC-provided services through its Access Supplier Assessments ("ASAs").[8] In its ASAs, AT&T evaluates the performance of its access vendors, including Bell Atlantic, GTE and the other Bell Companies across a wide variety of services, using pre-established "expected performance" figures to evaluate the vendor's performance.

17. The unbundling and local service resale mandated by the 1996 Act have significantly improved the ease of entry into local exchange markets and decreased entry-deterring sunk costs. Not only do these provisions provide further safeguards against foreclosure by ILECs, but they can also allow an entrant to counteract discrimination by self-supplying certain elements and combining them with ILEC-supplied UNEs. For example, a competitor dissatisfied with the quality of switched access could respond by unbundling the customers'

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[7] See Communications Act of 1934 (47 U.S.C. 151 et seq.)., as amended by the Telecommunications Act of 1996, Public Law 104–104—Feb. 8, 1996, 110 STAT. 56., hereinafter *1996 Telecommunications Act.* The Act's safeguards require that all local exchange carriers not discriminate on the resale of their telecommunications services (251.b.1); provide number portability, dialing parity, and nondiscriminatory access to ancillary services, poles, ducts, conduits, and rights-of-way to competing providers of telephone service (251.b.2-4); and that incumbent LECs negotiate in good faith (§251.c-1); provide interconnection and nondiscriminatory access to UNEs at any technically feasible point at least equal in quality to that provided to itself (§251.c.2-3); and provide nondiscriminatory physical collocation for interconnection or access to unbundled network elements (§251.c.6).

[8] MCI operates a similar program.

loops and combining those loops with self-supplied switching and transport. The Act specifically requires very granular unbundling of the ILECs' network.

18. UNEs and interconnection services are provided by ILECs to their competitors (CLECs, IXCs, ISPs and CSCs) pursuant to state and federally regulated tariffs, which usually specify the quality level and the timeframes within which these services must be provided.[9,10] Interconnection contracts between ILECs and their competitors can contain additional commitments on performance standards such as quality and timeliness, with direct quantitative measurements of quality, as well as private arbitration procedures to resolve disputes and determine potential damages.

B. Evidence of ILEC Discrimination and Integration

19. The behavior of ILECs that are vertically integrated into long distance suggests that there is little likelihood of the alleged discrimination, cross-subsidization, and non-cooperation. If these risks were as great as alleged by commenters, we would expect to see the harmful effects of integration on competitors of these firms. However, no such evidence exists. GTE owned the third largest IXC (Sprint) between 1983 and 1986. Starting in 1986 GTE gradually divested Sprint to United Telephone (which then renamed itself Sprint to form an integrated local/long-distance carrier). An empirical test by McChesney of interstate long distance quantities and prices did not find any evidence of discrimination resulting from GTE's ownership of Sprint.[11] The DOJ came to a similar conclusion in its 1986 review of the GTE-United joint-ownership of Sprint:

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9 For example, in the Bell Atlantic South region, cages for physical collocation must be made available to entrants within 120 business days of the request (60 business days for virtual collocation). See Bell Atlantic Network Services FCC Tariff #1 Sec. 19, pp. 945-947, 13th Rev., transmitted Dec. 3, 1998.

10 As specified by the Telecommunications Act, Bell Atlantic (or any other ILEC) has to provide physical collocation unless it demonstrates to state authorities that these requests cannot be granted because of technical reasons or space limitations. See 1996 Telecommunications Act, 47 U.S.C. § 251.(c)(6).

11 Specifically, McChesney found that GTE's ownership of Sprint did not lead to a statistically significant increase in the price of interstate long distance, as measured by the Message Telephone Service Consumer Price Index, nor did it lead to a statistically significant decrease in the quantity of interstate long distance, as measured by the

"We found no evidence, however, of any pattern of discrimination (by Sprint) ...
Perhaps most significant to our assessment of the consent decree's efficacy is that none of the interexchange carriers have complained to either the Department or the FCC concerning the GTOCs' provision of exchange access to them, even in response to our solicitation of such complaints."[12]

20. Other local exchange carriers, such as Frontier and SNET, have expanded *de novo* into long distance service, and the evidence to date does not indicate that these ILECs have acted to manipulate quality to reduce competition in the long distance market.[13]

21. ILECs compete with other firms, primarily CSCs, in a number of other markets, such as intraLATA (or local) toll service, high-capacity transport, ISP service and wireless. The indications from these markets strongly suggest that ILECs have not excluded their competitors. We find the experience in intraLATA toll particularly probative, as intraLATA toll service is provided in essentially the same way as interLATA interexchange service, except that the Bell Operating Companies are allowed to compete in intraLATA service. One might expect that if quality discrimination against the IXCs were possible, it would occur for the provision of competitive intraLATA service.

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total quarterly interstate switched access minutes. See Fred McChesney, "Empirical Tests of the Cross-subsidy and Discriminatory-access Hypotheses in Vertically Integrated Telephony," *Managerial and Decision Economics*, Vol. 16, 493-505, 1995. See also Affidavit of Fred S. McChesney in Support of the Motion of Bell Atlantic Corp., BellSouth Corp., Nynex Corp., and Southwestern Bell Corp., to Vacate the Decree, Civil Action No. 82-0192 (HHG), July 6, 1994. Also see Affidavit of Robert G. Harris and Carl Shapiro in support of Pacific Telesis Group's Request for a Waiver to Permit It to Provide Interexchange Services to Customers in California, January 26, 1995, and Reply Affidavit of Robert G. Harris and Carl Shapiro, May 24, 1995, in *U.S. v. Western Electric & AT&T*, Civil Action No. 82-0192 (HHG), p. 4.

[12] See Report to the Court of the Approval by the US Department of Justice, Pursuant to Paragraph VI(A) of the Final Judgment in *United States v. GTE Corporation*, of the Proposed Joint Venture Between GTE Corporation and United Telecommunications Inc., Civil Action No. 83-1298, June 30, 1986, p. 10.

[13] A limited survey of the New York and Connecticut public utility commissions carried out by Gilbert and Panzar in 1997 found that no complaints had been filed by IXCs alleging quality discrimination on the part of Frontier or SNET in the provision of access. See Affidavit of Richard J. Gilbert and John C. Panzar on behalf of Ameritech Michigan, CC Docket No. 97-137, at ¶ 45, hereinafter *Gilbert and Panzar Affidavit.*

22. Both Bell Atlantic and GTE have lost a substantial share of intraLATA carriage to competitors,[14] especially with the implementation in certain exchanges of intraLATA toll dialing parity, which suggests an absence of effective discrimination in intraLATA toll.[15] As discussed by Crandall and Sidak,[16] an analysis of competition in the provision of voice-mail, wireless or ISP service indicates that competitors have not been excluded. They find that wireless operators affiliated with Bell Atlantic do not have higher market shares than unaffiliated competitors, and that the GTE and Bell Atlantic have rather small shares in the provision of Internet service. These findings are difficult to reconcile with a pattern of widespread and successful exclusionary behavior by ILECs.

C. Katz and Salop do not provide evidence that non-price discrimination is pervasive

23. Not only is there evidence that discrimination would be very difficult, but commenters fail to provide persuasive evidence to support their claim that ILEC non-price discrimination is pervasive.

24. For instance, Katz and Salop claim that "there is considerable evidence of exclusionary behavior"[17] provided by Besen, Srinagesh, and Woodbury, while closer reading shows that this evidence is not at all convincing. Besen, Srinagesh and Woodbury argue that discrimination is established by the fact that Bell Operating Companies have not yet succeeded in obtaining approval for a Section 271 application.[18] This fact is in no way a proof that exclusionary behavior is taking place, as most of the delays of Section 271 approval can be

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[14] See *Crandall-Sidak Declaration* at ¶ 32.

[15] See P.S. Brandon and R. Schmalensee, "The Benefits of Releasing the Bell Companies from the Interexchange Restrictions," 15 Managerial and Decision Economics, pp. 349-364, for further discussion of the lack of evidence of anticompetitive behavior by Bell Operating Companies in intraLATA toll.

[16] See *Crandall-Sidak Declaration* at ¶ 51, ¶ 31, ¶¶ 38-50, respectively.

[17] See *Katz-Salop Declaration* at note 27.

[18] See *Besen-Srinagesh-Woodbury Declaration* at p. 15.

traced to the requirement that Bell Companies allow competitors seamless electronic ordering of unbundled network elements, and these electronic interfaces have proved difficult to implement. Besen-Srinagesh-Woodbury have presented no evidence that the slower than hoped Section 271 approval is due to exclusionary behavior by ILECs.[19]

25. Besen et al. then point to complaints by AT&T and MCI alleging that Bell Atlantic has proposed UNE tariffs that are not TELRIC compliant.[20] This evidence is hardly persuasive, because complaints by competitors can in no case be taken as persuasive evidence of discrimination, and furthermore, because Besen et al. fail to recognize that the 1996 Act does not require UNE prices to be TELRIC compliant, but merely cost-based. And even if the allegation were true, the 1996 Act specifically set up an arbitration process with fixed timelines to assure that UNE prices would be cost-based. Finally, Besen et al. discuss some hypothetical examples of non-price exclusionary behavior.[21] These do not amount to evidence that this behavior exists in practice, and, as we will demonstrate below, the theory behind these hypothetical examples is likewise not convincing.

D. Conclusion: Evidence of ILEC exclusionary behavior is lacking

26. Our review indicates that there is good reason to believe that it is very difficult for ILECs to engage in exclusionary behavior, and that there is no evidence in the literature that such behavior is occurring. We conclude that the so-called "evidence" cited by Katz and Salop is devoid of any empirical foundation, and is not persuasive as to the ability of ILECs to engage in exclusionary behavior. That on its own should be sufficient to dispose of the Katz-Salop hypothesis. Nevertheless, we now show that its theoretical justification is flawed too.

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[19] See Peter W. Huber, Local Exchange Competition Under the 1996 Telecom Act: Red-Lining the Local Exchange Customer, November 4, 1997. Report prepared for BellSouth and SBC Corp.

[20] See *Besen-Srinagesh-Woodbury Declaration* at pp. 16-17.

[21] See *Besen-Srinagesh-Woodbury Declaration* at pp. 17-19.

III. ASKING THE RIGHT QUESTIONS

B. Statement of the Katz-Salop argument

27. Katz and Salop examine potential exclusionary behavior that an ILEC might exercise to disadvantage a CSC. The CSC may offer a wide array of services, including local or long-distance, fixed or wireless, and voice or data communications. Katz and Salop hypothesize that a spill-over effect between markets may exist, that is, assuming a CSC operates in markets A and B, if the ILEC discriminates against the CSC in market A, then the CSC is competitively disadvantaged in market B. They argue that as a result of this discrimination, the CSC would be prevented from entering both markets by the merged ILEC, whereas it would enter absent the merger.

28. As we have shown above, there is little or no evidence that exclusionary behavior exists at all in the present U.S. regulatory climate. Nevertheless, we will assume for purposes of argument that exclusionary behavior is possible, and show that even under this assumption the merger is not likely to increase the incentives of the parties to exclude competitors.

B. The Correct Threshold Question

29. If we accept the working hypothesis that exclusionary behavior is possible, the correct question to ask is whether the merger will increase the likelihood of exclusionary behavior by GTE and Bell Atlantic. Given that none of the commenters has argued that the merger will make new types of exclusionary behavior possible, the threshold question that must be examined is whether the merger would increase the asserted incentives to engage in pre-existing types of exclusionary behavior. We therefore need to analyze the merger's effect on incentives and opportunities for exclusionary behavior, including responses by competitors, regulators, and the excluded party.

30. In their analysis, Katz and Salop do not ask the correct questions. Specifically, they overlook the existence of regulation (state and federal regulation, statutory safeguards under the Telecom Act of 1996, antitrust scrutiny by the U.S. Department of Justice, and the possibility of private antitrust enforcement), the role of expectations, and the presence of sunk costs to entry. Once these factors are considered, a properly completed analysis predicts no change in exclusionary behavior as a result of a merger between two ILECs. In the following section of this declaration, we analyze rigorously the theoretical basis for the Katz-Salop hypothesis.

IV. THERE IS NO SPILLOVER EFFECT IN PRICE EXCLUSIONARY BEHAVIOR.

31. Exclusionary behavior can be categorized as price or non-price. Price exclusionary behavior is behavior that aims either at providing competitive advantage to the incumbent or at preventing entry by selling inputs to competitors at prices that are above cost. We deal with price exclusionary behavior first, as the analysis of this category is straightforward.

B. Regulation constrains price exclusionary behavior

1. Statutory Requirements

32. Section 251 of the Telecommunications Act requires that ILECs provide competitors access to their networks in two forms.[22] Competitors can either buy basic building blocks such as interconnection services and unbundled network elements, or can instead purchase at wholesale rates entire services for resale to end-users. Rather than directly set prices, Congress prescribed a basic default rule that governs when the ILEC and its competitor are unable to reach a negotiated agreement. In such an instance, either the ILEC or the competitor can petition for compulsory arbitration under the provisions of section 252. The arbitration

[22] Additionally, further protection against discrimination targeting long-distance carriers is provided by Sections 251(g) and 272 of the Telecommunications Act, imposing equal access, non-discrimination and access charge imputation requirements.

provisions of the Act prescribe cost-based rates for interconnection services and unbundled elements,[23] and wholesale rates for purchase of wholesale service that are based on the retail rates charged by the ILEC minus the ILEC's avoided marketing, billing, collection, and other costs.[24]

33. In practice, when arbitration has been required, interconnection and UNEs have been priced by State commissions broadly following the FCC's long-run incremental cost methodology.[25] State commissions have commonly priced wholesale services by applying a standard percentage discount to the applicable retail rates (often setting one discount for business rates and another for residential rates). Although there is continuing dispute as to whether the FCC exceeded its statutory powers in its original August 1996 order, it is beyond doubt that the resale, UNE and interconnection prices set by the state commissions are not exclusionary. Local telephone companies have now successfully negotiated over 5,400 interconnection agreements, more than double the number of agreements negotiated just a year ago.[26]

2. Price regulation is so comprehensive that prices for inputs to competitors may even be below cost

34. The comprehensive price regulation of inputs to competitors introduces the strong possibility that the effective prices of inputs to competitors are actually below cost. Wholesale services are priced at the ILEC's retail rate minus avoided cost, which ensures that wholesale services are provided to entrants below cost if retail rates are unbalanced. Moreover, the entrant can always elect to build facilities. Because the entrant will select the mode of entry which tends

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[23] "[T]he just and reasonable rate for network elements for purposes of [interconnection and UNE pricing] (A) shall be (i) based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the interconnection or network element (whichever is applicable), and (ii) nondiscriminatory, and (B) may include a reasonable profit." See Telecommunications Act of 1996, *op. cit.*, at § 252.d.1.

[24] See Telecommunications Act of 1996, *op. cit.*, at § 252.d.3.

[25] See FCC *Report & Order in the Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, FCC 96-325, Aug. 1, 1996.

[26] See USTA Local Competition Report, December 9, 1998. Executive Summary, p. 1.

to minimize costs (build vs. unbundle vs. resale, or any combination thereof), and wholesale services have serious potential for being underpriced, it is likely that the effective price for the input to the CLEC is often below the ILEC's actual cost. Conversely, it is unlikely that the effective input price to the CLEC will ever significantly exceed the ILEC's actual cost.

3. Even the opponents to the merger do not believe in price exclusionary behavior

35. Katz and Salop implicitly recognize this point by restricting their statement about price exclusionary behavior to unregulated access services. While they claim that "[f]or unregulated access services, SBC and Ameritech will have the ability to raise access prices,"[27] the only example that Katz and Salop offer refers to a hypothetical future where some broadband services might not be regulated.[28] Furthermore, the externality model that they present is adapted (although, as we show below, misleadingly so) to non-price exclusionary behavior. Similarly, Besen, Srinagesh, Woodbury recognize that regulation essentially reduces the analysis to non-price exclusionary behavior: "Because both the FCC and the states regulate interconnection prices, Bell Atlantic and GTE may also choose to deny, delay or degrade the provisioning of inputs in their downstream rivals."[29] We therefore conclude that price exclusionary behavior should not be an issue given the statutory provisions of the 1996 Act and the role of federal and state regulators.

B. The merger is unlikely to increase price exclusionary behavior

36. Even if regulation were not able to lower prices to the level of costs, the merger would still not lead to an increase in any supposed price exclusionary behavior. Indeed, there is no disagreement with the fact that prices are regulated at levels far below monopoly price, and

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[27] See *Katz-Salop Declaration* at p. 21.

[28] See *Katz-Salop Declaration* at note 29.

[29] See *Besen-Srinagesh-Woodbury Declaration* at pp. 11.

that the ILECs are therefore constrained by the prices set by regulators. The merger does nothing to lift this constraint, and a merged entity would also set prices at the level imposed by regulators. Price exclusionary behavior is therefore not a concern in this merger. The Commission reached this very same conclusion in the *Bell Atlantic/Nynex Order*:

> "[W]e believe that price squeeze tactics are likely to fail under the circumstances presented here as a predatory tactic aimed at eliminating competition among interexchange competitor...MCI has not explained how the combined entity will reap a greater share of the benefits of a price squeeze than would the two firms separately."[30]

37. Furthermore, because of regulatory response, which is overlooked by Katz and Salop, the merger could lead to *lower* interconnection prices. Regulators are more likely to examine carefully the prices set by a larger firm. Furthermore, prior to the merger, a firm that wants to enter a location in GTE's territory and complains about interconnection rates will obtain, if it prevails, a reduction in GTE rates. Given that any revision in GTE rates will likely affect its rates in other locations, it provides a positive externality to all other entrants in GTE's territory. After the merger, this effect will also extend to locations where Bell Atlantic is the incumbent. Because the incentives to enter regulatory proceedings will not have decreased, and will have increased for firms interested in entering locations where GTE is the incumbent *and* locations where Bell Atlantic is the incumbent, the merger can actually reduce any price exclusionary behavior, under the unproved hypothesis that such behavior can exist.

38. All this discussion points out a major flaw in the "formal" model of Katz and Salop. They present an equation (eqn. 7) that summarizes the gain from exclusionary behavior by the incumbent.[31] The regulatory cost is represented by the term $S(d)$, which represents "the expected sanctions when the ILEC engages in amount d of exclusionary behavior." In their model, this regulatory cost is the same for the merged firm as it would have been for either of the

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[30] See *Bell Atlantic NYNEX Memorandum Opinion and Order,* Aug. 14, 1997, ¶ 117- 118.

component ILECs. One would expect it to be higher, if only because the changes in practices ordered by the regulator would be more extensive.

V. NON-PRICE EXCLUSIONARY BEHAVIOR FOR COMPETITIVE ADVANTAGE DOES NOT INDUCE ANY SPILLOVER EFFECT.

39. We now turn to a discussion of non-price exclusionary behavior, and first examine its use to acquire or reinforce competitive advantage against competitors who have already entered. We will show that the merger will not increase the prevalence of such conduct. To do so, we begin by classifying the type of exclusionary behavior along two dimensions: its verifiability and the type of communications to which it applies.

A. Classification

40. Some exclusionary behavior would be verifiable, allowing regulators and the courts to take appropriate remedial action. On the other hand, Katz and Salop speculate that there may be some exclusionary behavior, which would not be verifiable, and hence that regulators would not detect.[32] As discussed above, the paucity of hard evidence provided by the merger's opponents suggests that regulation handles verifiable exclusionary behavior well, and that any possible remaining exclusionary behavior must be non-verifiable.[33]

41. For simplicity, consider a situation where ILEC A is present in market A. Its potential merger partner, ILEC B, is present in market B, and the CSC operates or plans to operate in both markets A and B. We will examine the exclusionary behavior that ILEC A may theoretically practice against the CSC in market A (a symmetric analysis could be conducted for

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[31] See *Katz-Salop Declaration* at p. 82.

[32] See *Katz-Salop Declaration* at ¶ 52.

[33] It seems implausible that exclusionary behavior that cannot be detected by regulators (or reported to regulators by competitors) could be detected by consumers and thus have a meaningful impact on their purchase decisions.

the exclusionary behavior that ILEC B would practice against the CSC). Exclusionary behavior could (1) degrade the interconnection for communications that go from A to B through the CSC ("outbound" exclusionary behavior); (2) degrade at the same time the interconnection for communications that go from A to B and those that go from B to A through the CSC ("two way" exclusionary behavior); or (3) degrade the interconnection for communications that go from B to A through the CSC ("inbound" exclusionary behavior).[34] In the case where the CSC does not carry traffic between the two markets, but simply competes head-to-head with the ILEC in both markets for local service, the alleged exclusionary behavior could theoretically affect the CSC in (1) market A only; (2) both markets A and B; or (3) market B only.

B. Theoretical Analysis

42. Where exclusionary behavior is verifiable, any increase would lead to an increased detection rate by regulators. Regulators could then respond appropriately. Preempting this type of asserted exclusionary behavior does not require any advance action; a regulator could simply announce that it would not tolerate any increase in detected exclusionary behavior. This is precisely the approach taken by the FCC when restructuring access charges[35] and removing affiliate transaction requirements,[36] to mention just two examples, and by Judge Greene when allowing the Bell Operating Companies to enter a number of vertically related product markets,

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[34] Other communications could be considered: for instance some calls are done from consumers in market A to other consumers in market A through the CSC (for instance intraLATA long distance), or again some calls coming from or going out to third markets can be made through the CSC. It should be clear that in none of these cases the merger would have any effect.

[35] See *Access Charge Reform Order*, FCC 97-158 280-82.

[36] See Order In the Matter of *Amendment of the Commission's Rules to Establish Competitive Service Safeguards for Local Exchange Carrier Provision of Commercial Mobile Radio Services*, WT Docket No. 96-162, rel. October 3, 1997.

such as information services.[37] Note that all that is required is a credible threat of action by the regulator.

43. Let us next consider the case of non-verifiable outbound or two-way non-verifiable exclusionary behavior. If neither ILEC A nor ILEC B provides the type of communications that the CSC provides, then there are no incentives for exclusionary behavior, verifiable or not, before or after the merger. If ILEC A competes with the CSC before the merger on this type of communications, and ILEC B does not, then ILEC A would already have incentives to engage in the hypothetical exclusionary behavior to the maximum possible amount, as this behavior cannot be detected by the regulator. The merger would not change anything.

44. Thus, there is only one case where, in the Katz-Salop framework, the merger could create an additional incentive for non-verifiable outbound or two-way exclusionary behavior, and we will show that this case clearly does not arise in practice: This case would be the case where ILEC B is competing with the CSC and ILEC A is not competing with the CSC, nor is planning to compete with the CSC in the future. There are three reasons why this case would not arise in practice. First, the competition we are speaking about is competition between ILEC B and the CSC on services offered to the clients of ILEC A, when A is neither an actual nor a potential competitor. Extremely few, if any, such services exist. Second, both GTE and Bell Atlantic clearly have plans to compete with CSCs across all product markets. Third, the hypothesis we make for the sake of argument—that ILECs have the ability and incentive to degrade outbound calls—has been rejected by the Commission:

> "[C]ommenters argue that the incumbent LEC will be able to ... degrade the service of IXC competitors, by blocking calls at its own switch. Based on this

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[37] See Removal of Section II(D)1 Restrictions on the Provision of Information Services, *United States v. Western Electric Co.*, Civil Action No. 82-0192 (HHG), (D.D.C. Oct. 17, 1990).

record, we conclude that these concerns are not well-founded ... incumbent LECs have compelling incentives to deliver interstate calls to an IXC's POP."[38]

45. In the case of non-verifiable inbound exclusionary behavior ILEC A would not benefit directly from the degradation of interconnection, because the communications to which this behavior applies are communications initiated by customers of ILEC B, not customers of ILEC A. Hence, before the merger, ILEC A would not engage in any such exclusionary behavior. If ILEC B does not compete with the CSC, ILEC A will also have no incentives for exclusionary behavior after the merger.

46. This theoretical analysis thus shows that, for exclusionary behavior on inbound calls, the incentives hypothesized by Katz and Salop could only arise in the very restricted case where the exclusionary behavior practiced by ILEC A is both non-verifiable and benefits only ILEC B, not ILEC A. Again, this case is only theoretical. First, it requires not only that ILEC A does not compete with the CSC but also that it has no plan to do so. Second, the US Congress has already examined the question of whether ILECs have standalone incentives to discriminate against inbound calls, and found it wanting, thus authorizing Bell Operating Companies to provide interLATA service originating out-of-region but terminating in-region.[39] Third, we find that the commenters have not specifically identified any form of exclusionary behavior that would benefit the 'other' ILEC while not benefiting the perpetrator.

47. We therefore do not find that there exists—in reality—an exclusionary practice that conforms to the requirements of the Katz-Salop hypothesis. The burden is on the commenters to identify cogently a type of exclusionary practice for which this merger might realistically make a difference, a burden they have not met.

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[38] See FCC *First Report and Order*, In the Matter of Access Charge Reform, Price Cap Performance Review, Transport Rate Structure, End-User Common Line Charges, Dockets No. CC 96-262, CC 94-1, CC 91-213, CC 95-72, May 7, 1997, at ¶142.

[39] See 1996 Telecommunications Act, 47 U.S.C. § 271 (b)(2) and (4).

VI. THE EXTERNALITY ARGUMENT OF KATZ AND SALOP THAT SPILLOVER EFFECTS WILL INCREASE THE INCENTIVES TO PREVENT ENTRY IS NOT CONVINCING.

48. We have demonstrated so far that the analysis of exclusionary behavior for competitive advantage is not costly to incumbents. We now examine the case for costly price exclusionary behavior that might be undertaken to prevent entry.

49. Katz and Salop argue that the merged ILECs will have greater incentives to engage in exclusionary behavior to prevent entry by competitors. To explain their argument, we will again consider a situation in which ILEC A is the incumbent in market A, while its potential merger partner, ILEC B, is the incumbent in market B. A CSC is a potential entrant in both markets. Katz and Salop argue that exclusionary behavior by ILEC A would reduce the incentives of the CSC to enter and hence would generate "positive externalities" toward ILEC B. Before the merger, ILEC A would not take into account in its computations of profits the benefits its exclusionary behavior would generate for ILEC B. On the other hand, after the merger, it would take these benefits into account, Katz and Salop assert, and therefore would have incentives to conduct more exclusionary behavior, even if it is costly. Therefore the merger, according to Katz and Salop, would increase the equilibrium level of exclusionary behavior.

50. Although the argument looks convincing *a priori*, it does not withstand a closer analysis. The essence of their "externality argument" is that exclusionary behavior by firm A will profit firm B and vice versa. When they are owned separately, they will each decide whether or not to engage in exclusionary behavior without taking into account the benefit provided to the other. Once they have merged, they will take into account these external benefits, and therefore will supposedly have an increased incentive to exclude.

51. As we have shown above, there is no compelling evidence that ILECs can engage in exclusionary behavior. Even if there were compelling evidence, though, it would be

extremely difficult to determine the empirical validity of an argument like the one made above. One would need to measure the cost of exclusionary behavior, and its benefits to the incumbent firms, as well as to the potential entrant. This would clearly be a formidable task. However, such a difficult empirical undertaking is not necessary because a detailed examination of the Katz and Salop theory shows that it is not robust, exaggerating the risks of exclusionary behavior because its description of the "entry game" is flawed, and not applicable to most cases of entry.

52. Katz and Salop's analysis assumes that the incumbent firms can commit to exclusionary behavior before the CSC has made the decision to enter. It is not the threat of exclusionary behavior that scares away the entrant, but the fact that exclusionary behavior has already occurred. On the other hand, in their institutional descriptions of entry Katz and Salop stress sunk common costs: "[E]ven if the multiple local markets are distinct, there may be common research, product development, supporting software development, and promotional costs for a CLEC entrant."[40] These costs are not linked to entry into a single market, and once they have been expended, the CSC can enter both markets A and B. Therefore, the fact that these costs are incurred is a necessary condition to enter even one market and a sufficient condition to enter all.

53. To see this, let us be more explicit about the hypothetical sequence of events:

(a) The CSC decides whether or not to make the investment needed to enter.

(b) ILECs A and B decide whether or not to engage in exclusionary behavior.

(c) The CSC decides whether or not to actually enter in the market.

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[40] See *Katz-Salop Declaration* at p. 43.

54. The outcome of this sequence of decisions will be the same with or without merger. Consider first the situation without a merger. At the third stage, the CSC will decide to enter a market only if the profits from so doing are positive, taking into account the fact that the investment done at the first stage cannot be recovered. At the second stage, each ILEC will independently choose to engage in exclusionary behavior only if a) this makes the profits from entry negative (which implies that exclusionary behavior indeed prevents entry) and b) the costs of exclusionary behavior are less than the benefits of preventing entry (which implies that preventing entry is worthwhile). If for each ILECs at least one of these conditions is not true, the CSC knows that it need not fear exclusionary behavior and will choose to enter in the first stage of the game.

55. Assume now that the ILECs have merged. At the third stage, the CSC will use the same criterion than without merger to decide whether to enter each of markets A and B. Indeed, at this point, given that the joint costs have already been incurred, the profit from entering one market is independent of the decision to enter or not to enter the other market. The merged entity will find it worthwhile to engage in exclusionary behavior on, say, market A if and only if a) this makes the profits from entry in market A negative and b) the costs of this exclusionary behavior are less that the benefits from preventing entry in market A. These are the same conditions under which ILEC A would have engage in exclusionary behavior absent the merger. Therefore, the CSC will know in the first stage of the game that it will face exclusionary behavior under the same conditions than without the merger, and will take the same decision.

56. The crucial point in the reasoning is the assumption, made by Katz and Salop, that the main impediment to entry is the necessity to recover important sunk common costs. After these costs are sunk, the link between the different markets is broken, and even a merged firm will decide whether or not to let the CSC enter a particular market by looking only at the situation in that market.

57. It is easy to see that in the framework we are using, the result is very general: if we keep the same structure but let the different costs and profits vary, we find in the model that there would be exclusion by a merged firm if and only if there would be exclusion when the firms act independently.

58. It should be stressed that the Katz-Salop hypothesis is very dependent on the assumption that the hypothetical exclusionary behavior takes place before any entry decision is taken. We have already seen that if such behavior took place afterwards, then there would be exclusion with the merger if and only if there would be exclusion without the merger. The same result holds true if exclusionary behavior and entry were to happen "at the same time." This would be the relevant framework if the CSC were preparing for entry at the same time that firms A and B were preparing exclusionary behavior, with none of these parties able to commit to any action before the others.[41]

59. To see why the above argument holds true, assume that the profits of ILEC A depended on the actions that it takes and the actions taken by the CSC in market A. Similarly, assume that the profits of ILEC B depended on the actions that it takes and on the actions taken by the CSC in market B. The profits of the CSC would depend on the actions that it takes in both markets as well as the actions taken by both of its competitors, with no restrictions on the way in which these actions interact with each other in its profit function.

60. Consider now an equilibrium of the game without the merger. The three firms in theory will choose optimal actions given the actions taken by the two other firms. Assume now that ILECs A and B merge, and that the CSC does not change its behavior. Because the profits of firms A and B would not depend directly on the actions taken by the other ILEC (they are in

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[41] For an analysis of entry that stresses the fact that firms make simultaneous decisions in entry games, see Luís M. B. Cabral, "Entry Mistakes," CEPR Discussion Paper 1729, November 1997.

separate markets), the merged ILEC would have no incentive to change the actions taken by its two component firms. Hence, the CSC also would have no incentive to change its behavior, and the equilibrium would not be affected. [42]

VII. THERE IS NO EVIDENCE THAT MERGERS BETWEEN MAJOR ILECS WILL HAVE A NEGATIVE IMPACT ON THE INTERNET

61. Baseman et al. argue that the merger would create a risk to competition in the Internet. Their analysis is not convincing. Most of Baseman et al.'s discussion focuses on the negative consequences that would result if two ISPs owned by two ILECs succeeded in dominating the market for dial-up connections. There is very little explanation about the way in which these two ISPs would come to dominate the market, except for unsubstantiated allegations that the introduction of xDSL would exacerbate the problem of discrimination against ISPs that are not owned by ILECs. All these hypotheses are clearly at odds with the current structure of the market for dial-up connections. As shown in the Crandall-Sidak Declaration, the combination of GTE and Bell Atlantic would not form a dominant ISP,[43] and it is extremely unlikely that the combined company could come to dominate this segment, given the existence of other ISPs which are several times larger and the numerous regulatory protections currently in place.

62. The analogy that Baseman et al. draw between the MCI WorldCom merger and the proposed Bell Atlantic-GTE merger is also fundamentally misleading. First, the MCI WorldCom merger yielded instantaneously a share of the backbone market of approximately 50%.[44] In the case of the GTE-Bell Atlantic merger, Baseman et al. can only imagine that the merger will enable the combined firm to reach market dominance over an undetermined horizon.

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[42] Formally, we assume that the profits of the CSC are of the form $\pi^C(x_A, x_B, y_A, y_B)$, the profits of firm A of the form $\pi^A(x_A, y_A)$ and the profits of firm B of the form $\pi^B(x_B, y_B)$, where x_A and x_B are the actions taken by the CSC in markets A and B respectively and y_A and y_B are the actions taken by firms A and B (these actions could be multidimensional). It is easy to check that the equilibrium conditions are equivalent when ILECs A and B are merged and when they are not.

[43] See *Crandall-Sidak Declaration* at ¶¶46-48.

Second, the type of network externalities is very different in the two cases, and even in the unlikely case where GTE-Bell Atlantic succeeds in dominating a large proportion of dial-up connections, the threat to interconnectivity would be limited. Dial-up customers do not connect mainly to communicate with each other. They connect to communicate with Web sites owned and managed by corporations, governments and non-profit organizations. Degrading the connection between its dial-up customers and these sites will not improve the competitive advantage of the merged firm.

63. If a large ISP were to pursue this targeted degradation, dial-up customers of small ISPs would not benefit from switching to the large ISP, as traffic exchanged between dial-up customers consists mainly of e-mail messages, for which the quality of interconnection will always be satisfactory. Therefore, the Crémer, Rey and Tirole selective degradation argument does not apply to ISPs, as larger ISPs would not gain a competitive advantage by degrading their own customers' connections to the Internet. Thus, even if Bell Atlantic and GTE were to dominate ISP service (which they will not), it would not be rational for them to pursue a targeted ISP degradation strategy.

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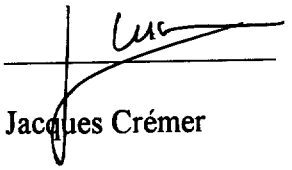
[44] See *Internet Affidavit of Robert G. Harris on Behalf of GTE* in the MCI WorldCom merger, CC Docket No. 97-211, March 13, 1998, Figure 3, p. 21.

VIII. CONCLUSION

64. In this declaration, we have shown that exclusionary behavior is more difficult to implement than Katz and Salop claim. We have also shown that even if exclusionary behavior existed, the merger between two ILECs would not provide strong incentives for the combined company to engage in more exclusionary behavior. This conclusion holds both for exclusionary behavior aimed at increasing competitive advantage and preventing entry. We conclude that there is no serious evidence that the merger will lead to an increase in exclusionary behavior, and that the arguments of Katz and Salop do not present a sufficient reason to deny the application for transfer of control.

We hereby swear, under penalty of perjury, that the foregoing is true and correct.



Jacques Crémer

Executed on this 15th day of December 1998.

Jean-Jacques Laffont

Executed on this 15th day of December 1998.